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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte THEODORE F. RIVERA, ADAM TATE, and SCOTT A. WILL

Appeal 2008-004470
Application 10/680,039
Technology Center 2100

Decided:¹ June 5, 2009

Before JOHN C. MARTIN, HOWARD B. BLANKENSHIP, and
THU A. DANG, *Administrative Patent Judges*.

DANG, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal the Examiner's final rejection of claims 1-16 under 35 U.S.C. § 134 (2002). We have jurisdiction under 35 U.S.C. § 6(b) (2002).

We affirm.

¹ The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Data (electronic delivery).

I. STATEMENT OF THE CASE

A. INVENTION

According to Appellants, “[t]he present invention is a system and method for assessing the probability of business transaction success in a target computer environment. The system gathers defect data for all [sic] software applications used to complete a given business transaction, analyzes the defect data across these software applications, and predicts a business transaction failure rate within the computer environment” (Spec. 2, ¶ [0007]).

B. ILLUSTRATIVE CLAIM

Claim 1 is exemplary and reproduced below:

1. A method for assessing the probability of transaction success of a business transaction that will interact with one or more software applications in a target computer environment, the method comprising the steps of:

gathering a plurality of defect data items corresponding to the first software application;

relative to a specific business transaction in a target computer environment and for each item of the gathered defect data, generating an item-specific predicted business transaction failure rate based on the defect data items;

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combining each item-specific predicted business transaction failure rate so as to generate a combined business transaction failure rate within the computer environment; and

generating an output indicating the combined business transaction failure rate within the computer environment.

C. REJECTIONS

The Examiner relies upon the following prior art in rejecting the claims on appeal:

Siegel U.S. 5,548,718 Aug. 20, 1996

Claims 1-16 stand rejected under 35 U.S.C. § 102(b) as anticipated by Siegel.

II. ISSUES

1) Have Appellants shown the Examiner erred in finding that Siegel discloses “an item-specific predicted business transaction failure rate based on the defect data items” (claim 1)?

2) Have Appellants shown the Examiner erred in finding that Siegel discloses “combining each item-specific predicted business transaction failure rate” (claim 1)?

III. FINDINGS OF FACT

The following Findings of Fact (FF) are shown by a preponderance of the evidence.

Siegel

- 1) Siegel's mapping mechanism determines a "hazard rate" for each "area" of a software product by dividing the number of area failures by the number of area "hits" (col. 5, ll. 61-65), where an "area" is a logical grouping of software commands (col. 4, l. 67 – col. 5, l. 1) and a "hit" refers to one execution of a command (col. 5, l. 65).
- 2) The mapping mechanism determines a "mean hits-to-failure" for each area by inverting the respective hazard rate (col. 6, ll. 1-5).
- 3) The mapping mechanism normalizes the mean hits-to-failure for each area by dividing it by the total mean hits-to-failure for all areas (col. 6, ll. 5-10).

IV. PRINCIPLES OF LAW

Under 35 U.S.C. § 102, "[a] single prior art reference that discloses, either expressly or inherently, each limitation of a claim invalidates that claim by anticipation." *Perricone v. Medicis Pharm. Corp.*, 432 F.3d 1368, 1375 (Fed. Cir. 2005) (citation omitted). "Anticipation of a patent claim requires a finding that the claim at issue 'reads on' a prior art reference." *Atlas Powder Co. v. IRECO, Inc.*, 190 F.3d 1342, 1346 (Fed Cir. 1999).

"[T]he PTO gives claims their 'broadest reasonable interpretation.'" *In re Bigio*, 381 F.3d 1320, 1324 (Fed. Cir. 2004) (quoting *In re Hyatt*, 211

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F.3d 1367, 1372 (Fed. Cir. 2000)). The claims must be given the broadest reasonable interpretation consistent with the specification. *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997). However, “limitations are not to be read into the claims from the specification.” *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993) (citing *In re Zletz*, 893 F.2d 319, 321 (Fed. Cir. 1989)).

If the body of a claim fully and intrinsically sets forth all of the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention’s limitations, then the preamble is not considered a limitation and is of no significance to claim construction. *See Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305 (Fed. Cir. 1999); *see also Rowe v. Dror*, 112 F.3d 473, 478 (Fed. Cir. 1997) (“[W]here a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention, the preamble is not a claim limitation.”).

V. ANALYSIS

35 U.S.C. § 102

In the Appeal Brief, Appellants argue that Siegel does not disclose “the action of (or a circuit for) generating ‘an item-specific predicted business transaction failure rate based on the defect data items’” (App. Br. 5). With respect to this limitation, Appellant further argues that the cited teaching of Siegel “discloses only a system in which a mapping mechanism

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receives failure-related data for an area of a single application, not for a business transaction that can interact with several different applications, as recited in the independent claims.” (App. Br. 5-6; emphasis added).

The Examiner responds that Siegel discloses the above limitation by way of generating a “failure rate” for each of “multiple commands that are executed by the users as transactions in a computer environment” (Ex. Ans. 8-9). The Examiner also responds that the “limitations of claim 1 are merely directed to a single software application” and, in that regard, notes that “claim 1 recites ‘a business transaction that will interact with one or more software applications . . .’ and ‘gathering plurality of defect data items corresponding to the first software application’” (Ex. Ans. 8; Examiner’s emphasis).

In view of the above, we address whether claim 1 requires a “business transaction” that interacts with more than one software application or, alternatively, may interact with only one software application. We also address whether Siegel discloses “an item-specific predicted business transaction failure rate based on the defect data items” (claim 1).

We give the claims their broadest reasonable interpretation. *See Bigio*, 381 F.3d at 1324. Since the language “for assessing the probability of transaction success of a business transaction that will interact with one or more software applications in a target computer environment” is recited in the preamble of claim 1, we will not limit claim 1 to that language. In particular, we find the preamble is not limiting, but rather recites the purpose or intended use of the claimed invention. *See Pitney Bowes, Inc.*, 182 F.3d

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at 1305; *see also Rowe v. Dror*, 112 F.3d at 478.

However, even assuming the preamble were limiting in this instance, contrary to Appellants' arguments, the preamble of claim 1 would not limit the recited "business transaction" to being a transaction that interacts with several different software applications (App. Br. 5-6). We note that the language of the preamble of claim 1 permits a "business transaction" that interacts with a single software application because the preamble recites "a business transaction that will interact with one or more software applications" (emphasis added). The terms "one or more" allow for any number of software applications. Thus, even assuming the preamble were limiting in this instance, we would interpret the recited "business transaction" as reading on a transaction that interacts with only one software application.

Moreover, the steps of claim 1 permit a "business transaction" that interacts with a single software application because the "defect data items," from which each "item-specific predicted business transaction failure rate" is generated, are recited as "corresponding to the first software application" (claim 1; emphasis added). That is, the "defect data items" are not recited as corresponding to more than one software application, e.g., as corresponding to first and second software applications. Accordingly, for the above reasons, we interpret the recited "business transaction" as reading on a transaction that interacts with only one software application.

We now address whether Siegel discloses "an item-specific predicted business transaction failure rate based on the defect data items" (claim 1).

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With respect to this limitation, claim 1 particularly recites “an item-specific predicted business transaction failure rate” which is generated “for each item of the gathered defect data” but also “based on the defect data items” (emphasis added). From the language of claim 1, we find it unclear as to whether claim 1 permits a one-to-one correspondence between each “defect data item” and “item-specific predicted business transaction failure rate.” However, the Specification states that “for each item of the gathered defect data, i.e. each potential factor for transaction failure given the known defect, the system generated a predicted business transaction failure rate based upon that item” (Spec. 5, ¶ [0017]; emphasis added). Thus, consistent with the Specification, we interpret claim 1 as permitting a one-to-one correspondence between each “defect data item” and “item-specific predicted business transaction failure rate.”

In view of our interpretation of claim 1, consistent with the Specification, we agree with the Examiner’s finding that Siegel discloses “for each item of the gathered defect data, generating an item-specific predicted business transaction failure rate based on the defect data items.” Siegel’s mapping mechanism determines a “hazard rate” for each area of a software product by dividing the number of failures in an “area” by the number of “hits” in the area (FF 1). The mapping mechanism also determines a “mean hits-to-failure” for each area by inverting the respective hazard rate (FF 2). Thus, just as claim 1 recites “an item-specific predicted business transaction failure rate” that is generated for each “defect data item,” Siegel discloses a mean hits-to-failure that is generated for each

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hazard rate. We conclude an artisan would have understood the recited “defect data item” as reading on Siegel’s hazard rate, and would have further understood the recited “item-specific predicted business transaction failure rate” as reading on Siegel’s mean hits-to-failure.

In view of the above, we conclude Appellants have not shown the Examiner erred in finding that Siegel discloses “an item-specific predicted business transaction failure rate based on the defect data items” (claim 1).

In the Appeal Brief, Appellants also argue that Siegel “does not disclose the action of (or a circuit for) ‘combining each item-specific predicted business transaction failure rate’” (App. Br. 5). With respect to this limitation, Appellants further argue that “Siegel is only determining a mean hits-to-failure for a software product (which, as discussed above, is a single software application, such as a word processor) by normalizing the hits-to-failure of each area (an area being a portion of an application, such as a font handler or a file manipulation module) that is part of a single software product” (App. Br. 7).

The Examiner responds that Siegel discloses the above limitation by way of combining failure rates to generate a software reliability metric (Ex. Ans. 9). As previously noted, the Examiner also responds that the “limitations of claim 1 are merely directed to a single software application” (Ex. Ans. 8).

In view of the above, we repeat our conclusion that the recited “business transaction” of claim 1 reads on a transaction that interacts with a single software application. We now address, below, whether Siegel

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discloses “combining each item-specific predicted business transaction failure rate” (claim 1).

We agree with the Examiner’s finding that Siegel discloses this limitation by way of generating the software reliability metric. In doing so, Siegel’s mapping mechanism normalizes the mean hits-to-failures by dividing the mean hits-to-failure for each area by the total mean hits-to-failure for all areas (FF 3). We conclude an artisan would have understood this normalization of each mean hits-to-failure (i.e., this division by the aggregate of all mean hits-to-failures) to be “combining” the means hit-to-failures of Siegel. As such, since we have already concluded an artisan would have understood the recited “item-specific predicted business transaction failure rate” as reading on Siegel’s mean hits-to-failure (see above), we further conclude an artisan would have understood the recited “combining each item-specific predicted business transaction failure rate” as reading on Siegel’s normalization of each mean hits-to-failure.

In view of the above, we conclude Appellants have not shown the Examiner erred in finding that Siegel discloses “combining each item-specific predicted business transaction failure rate” (claim 1). Appellants also have not shown the Examiner erred in finding that Siegel discloses “an item-specific predicted business transaction failure rate based on the defect data items” (claim 1). Accordingly, Appellants fail to show that the Examiner erred in rejecting claim 1 under 35 U.S.C. § 102(b) as anticipated by Siegel.

Appellants do not provide separate arguments for independent claim 9

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or dependent claims 2-8 and 10-16 (depending from claims 1 and 9, respectively). Therefore, Appellants fail to show that the Examiner erred in rejecting claims 1-16 under 35 U.S.C. § 102(b) as anticipated by Siegel.

CONCLUSIONS OF LAW

- (1) Appellant has not shown the Examiner erred in finding that claims 1-16 are anticipated by Siegel.
- (2) Claims 1-16 are not patentable.

DECISION

We affirm the Examiner's decision rejecting claims 1-16 under 35 U.S.C. § 102(b).

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

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